[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS News Bulletin 873 27TH AUGUST 1995

SSTV Information

Condensed from an article by Radioware PO Box 1478 Westford MA 01886. Week 2 De VK2FJL @ VK2EHQ

Transmission Modes

The original 8 second SSTV transmission mode (around 1958) had the following characteristics:

- black = 1500 Hz
- white = 2300 Hz
- grey levels in between
- 120 scan lines
- 15 lines per second
- 5 mS of 1200 Hz for horizontal sync
- 30 mS of 1200 Hz for vertical sync

Since that time many more modes have been invented, sometimes to add new capabilities, sometimes the result of Not Invented Here syndrome.

The major groups are:

Robot - Introduced with the Robot scan converters (California).
Wraase - Introduced with the Wraase scan converters (Germany).
Martin - Developed by Martin Emmerson (England).
First available as replacement PROMs for Robot 1200C
Scottie - Developed by Eddie Murphy (Scotland).
First available as replacement PROMs for Robot 1200C.
AVT - Developed by Ben Blish/Williams (Montana).
First available in the AVT system.

The Robot, Wraase, Martin, and Scottie modes are all closely related. They all use the tones above for black, white, and grey levels. They all have 1200 Hz horizontal sync, although some Martin and Scottie implementations rely on accurate crystal oscillators and ignore the horizontal sync once synchronized. Colour is generally transmitted by sending each scan line 3 times, once each for red, green, and blue components.

Robot is different from the rest in that it encodes colours with luminance (Y) and chrominance (R-Y and B-Y) instead of R,G,B.

Each of these modes has a few different speeds, usually providing 120 or 240 scan lines and varying degrees of horizontal resolution (Actually some send 128 or 256 lines but the top 8 or 16 are always a fixed grey scale, leaving 120 or 240 usable lines.) In general, the trade-off is time vs.image quality: the modes with the best image quality require the most time.

The Robot modes have a much longer vertical sync (called VIS) containing 7 bits of information and a parity bit. This identifies the format of the following image so manual selection is not required on systems that recognize it.

Everyone else has adopted the Robot VIS coding and assigned themselves unused codes in the original specification. Unfortunately, Scottie DX and one of the AVT modes use the same VIS code due to alack of cooperation among developers.

The AVT mode is radically different from the rest. It has no horizontal sync at all; very accurate crystal oscillators are required to prevent slanted pictures. After 3 repetitions of the usual Robot VIS code, it has a digital header with 32 repetitions of the transmission mode, and a sequence number. It is only necessary to receive one of the 32 groups correctly to achieve synchronization.

More next week

This information was kindly supplied by Frank VK2FJL, and will run over 5 - 6 weeks. If you have any queries, contact Frank on packet at VK2EHQ. Our thanks to Frank for contributing to the broadcast.

AMATEUR RADIO OPERATORS CAN YOU ASSIST?

COMMISSION OF INQUIRY INTO RELATIONS BETWEEN THE CAA AND SEAVIEW AIR

As reported in the media last year, on Sunday 2 October 1994, an aircraft was lost between Williamtown and Lord How Island. The lives of the pilot and all 8 passengers were lost. The aircraft was a 10 seat Aerocommander 690B with a call sign of VH-SVQ.

Between midday and 2pm of that day, there were various communications among VH-SVQ and three other airborne aircraft (VH-IBF, VH-SVV and VH-SVN). The communications occurred on VHF frequency 120.6 mhz [sic].

Information about the communications may be of assistance to the Commission of Inquiry into the Relations between CAA and Seaview Air.

If you, or any person you know, heard radio exchanges on 2 October 1994 which you believe may have been to, from or about the aircraft VH-SVQ, would you please, as soon as possible, telephone Ms Christine Briton, Secretary of the Commission on (02) 336 7100 or send a fax on (02) 360 7551.

Written correspondence should be addressed to:
   The Secretary
   Commissions of Inquiry into the Relations Between the CAA
        and Seaview Air
   Locked Bag 4312 (GPO)
   Sydney 2001

   --advertisement in the Sydney Morning Herald on Wednesday 23ed August

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IPS WEEKLY SOLAR AND GEOPHYSICAL REPORT

(18 AUGUST - 24 AUGUST)

SUMMARY

Date	18	19	20	21	22	23	24
10cm	72	72	71	71	70	74	77
A	8	10	6	3	9	11 (	5 estimated)
T	17	14	16	14	18	35	12

SOLAR ACTIVITY WAS VERY LOW 18TH TO 23RD, AND LOW ON 24TH AUGUST.

THE GEOMAGNETIC FIELD AT LEARMONTH W.A. WAS QUIET 18TH TO 19TH, AND QUIET TO UNSETTLED THEREAFTER EXCEPT FOR A BRIEF ACTIVE PERIOD EARLY ON 23RD AUGUST.

IONOSPHERIC F2 CRITICAL FREQUENCIES WERE MOSTLY NEAR PREDICTED MONTHLY VALUES. THERE WERE BRIEF ENHANCED PERIODS TO 40 PER CENT ON 22ND AND 23RD. SOME SPREAD F WAS OBSERVED ON 21ST, AND BRIEF SPORADIC E ON 22ND.

FORECAST

(25 AUGUST - 31 AUGUST)

SOLAR: LOW

GEOMAGNETIC: QUIET

IONOSPHERIC: NEAR PREDICTED MONTHLY VALUES WITH GOOD HF CONDITIONS.

COURTESY OF IPS RADIO AND SPACE SERVICES

RTDX0818 RTTY DX

VK2SG RTTY DX NOTES FOR WEEKENDING 18 AUG 95 (BID RTDX0818)

It was brought to our attention from Syd, VK2SG an interesting note that this is the 850th set of notes for the VK2SG RTTY DX Bulletin that started in 1978. We all Thank you for this fine weekly edition. God speed, Syd and Thanks for inviting us to assist you.

Our information this week came from: DJ3IW and the Cent-Europe DXCluster Node DB0SPC, I5FLN and the IK5PWJ Packet Cluster, JF1MGI, N2VYU, W2JGR and the NJ0M node the Twin-Cities DX Packet Cluster and W5KSI. Thank you all for your assistance.

Bandpass

FRIDAY 11

1552-14089 WP4Q
1554-14089 GM4ZET
1556-14084 UY9FJ
1611-14085 OE7GX
1612-14087 UT7FJ
1739-14085 SV1ADG/SV9
2042-14088 UR5EDU

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2158-14082  HP1DGX
2202-14085  CO2ZD
2217-14083  WP4Q
2228-14086  4X6UO


SATURDAY 12

1221-14084  CX7BF
1232-14087  FG5GZ
1321-14083  UX2FXX
1324-14088  UR5EDU
1417-14084  CX7BF
1501-14086  PJ2MI
1958-14085  SV1ADG/SV9
2113-14082  VP8CKN
2119-14087  S58AA
2128-14084  UX1CN
2133-14082  UR5EDU
2201-14082  V31JU
2211-21087  TJ1GD
2317-14080  CX7BF

SUNDAY 13

0331-14085  AH6HH
0930-14085  PJ2MI
1102-14084  A71BH
1234-14084  V31JU
1358-14082  KG4NR
2118-14085  KI4PR/LU
2223-14085  PJ2MI

MONDAY 14

1407-14081  9G1BS
1453-14085  V51C
2137-14082  HP1DGX

TUESDAY 15

1504-14081  9G1BS
1829-14088  UA9TK
2037-14087  VP2VBL
2304-14081  TI2OY
2354-14086  KI4PU/LU

WEDNESDAY 16

0048-14086  VE8RCS

THURSDAY 17

1215-14083  UX2FXX
1220-14085  YU7AL
1238-14085  XE1MN
1501-14085  9G1BS

NOTES OF INTEREST:

Sudan, ST. Louis G4OJW, formerly ST2AA is back in England
and does not think he will be going back to Sudan.
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Don't forget the SARTG Contest this weekend. This contest runs in three separate periods. 0000-0800Z Saturday, 1600-2400Z Saturday and 0800-1600Z Sunday. RTTY only. Exchange RST and QSO number starting with 001. For information, July Digital Journal or July QST.

THE VK2SG RTTY DXNOTES are also available on Internet via Telnet or FTP at ab6z.ampr.org, at reflectors dx@ve7tcp.ampr.org, and digital-dx@st.rim.or.jp. See also the OH2BUA WebCluster at URL http://www.clinet.fi/~jukka/webcluster.html

For next week's bulletin send your bandpass to Jules, W2JGR at W5KSI.#NOLA.LA.USA.NA

REMEMBER, DX DON'T SLEEP.
GL DE BOB, WB2CJL AT W5KSI.#NOLA.LA.USA.NA

ARLD044 DX news

This week's bulletin was made possible with information provided by Tedd, KB8NW, Rolf, SM5MX, Hans, K0HB, Bruce, WA3RHW, Bob, N8CW, K6URI, W3HG, Joe, NJ1Q, the OPDX Bulletin and Contest Corral from QST. Thanks to all.

LAOS, XW. Andreas, DK9LM and ex-TA1ZE, is in Laos for 20 months and will try to obtain a license to operate.

MADAGASCAR, 5R. Shun, JF1MGI/VK9MG, will be in Madagascar until the end of September to conduct medical studies, specifically the ecosystems of rare animals. Radio activity will be concentrated during the third week of September using the call sign 5R8EU, with an emphasis on RTTY, PacTOR and low bands. QSL to his home CBA.

UNITED ARAB EMIRATES, A6. Listen for newly licensed amateurs A61AI and A61AM.

LIBYA, 5A. It has been reported that there are three operators at the 5A1A club station. Check 7005 kHz at 2000z for CW and 14207 or 14243 for SSB.

DXPEDITION NEWS. Ali, ZP5ALI, will be on the air from Syria as YK1/ZP5ALI August 22 to 27, from Egypt as SU1/ZP5ALI August 28 to September 3 and Lebanon as OD5FR September 4 to 14. He will run SSB on 20, 15 and 10 meters. QSL to Fagues Rahal, Avda Pacheco 5257, Asuncion, Paraguay.

ARUBA, P4. Jack, N2VW, will be signing P40T from Aruba September 5 to 12. He will be in on the WAEDC SSB Contest action. QSL this operation of P40T via N2VW with SASE/SAE with postage.

TURKS AND CAICOS ISLANDS, VP5. PA3ERC, PA3EWP, PA3BBP and PA3FQA will be signing /VP5 from Providenciales Island September 7 to 26, all bands/modes. They will sign VP5C for the WAE SSB and CQ WW RTTY contests. QSL via PA3ERC.

SAINT MAARTEN. Mike, K6URI, will be operating as PJ7/K6URI September 9 to 23 on 40, 20 and 15 meters. Extra effort will

be made to work novices on 40 meters. QSL via K6URI w/SASE or postage. All novices will receive cards, regardless of SASE/postage status.

BERMUDA, VP9. Don, W4ZYT, plans on being active from Southampton Parish as W4ZYT/VP9 September 16 to 22. Activity will be mostly CW on 40 through 15 meters.

WAKE ISLAND, KH9. Tom, AL7EL, will be active as KH9/AL7EL in late October.

COMING EVENTS

SEPTEMBER	3RD	DARC CRORONA 10M DIGI
	23rd-24th	CQ WW RTTY CONTEST
OCTOBER	21ST-22ND	JARTS WW RTTY CONTEST

Society information
The Society may be contacted at : PO Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President(Col) VK2CTD at VK2XSB, or the Secretary (Pat) VK2JPA at VK2AAB.

News items may be sent to Broadcast Officer PO Box 60 Blacktown 2148 Australia, or by packet to VK2JPA at VK2AAB. Email address for the Broadcast Officer is :

patl(at)pitt.conmusic.su.oz.au

The Society welcomes news items on any digital subjects from anywhere in the broadcast coverage area. We are looking for-ward to news from your areas to let other amateurs know what you are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer

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Dave Horsfall (VK2KFU) | dave@esi.com.au | VK2KFU @ VK2DAA.NSW.AUS.OC | PGP 2.6
Opinions expressed are mine. | D8 15 71 F9 26 C8 63 40 5E 63 5C 65 FC A0 22 99